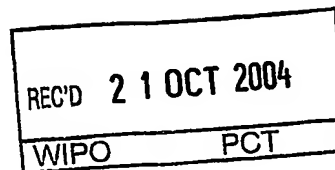




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I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Complete specification in connection with Innovation Patent No. 2003100844 for a patent by VISION GROWTH PTY LTD as filed on 08 October 2003.



WITNESS my hand this
Second day of September 2004

LEANNE MYNOTT
MANAGER EXAMINATION SUPPORT
AND SALES

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Field of the invention

The present invention relates generally to gaming consoles, gaming machines or networked gaming machines and, more particularly, to gaming machines found in casinos or betting environments. In addition the present invention relates to a door frame assembly for a gaming machine.

Background of invention

Most typical gaming machines provide a single display means located so as to be viewed through an open portal in a main gaming console door frame assemblage (herein referred to as a door frame). Below the display area on the main door frame a control panel area is provided to allow a player to actuate any required player input with regards to controlling of the gaming machines various functions and game play, such as placing of bets, and initiating the commencement of games. Preferably, a coin input device and bill acceptor are also located on or near the control panel area. In addition to the described features of a typical gaming machine, more modern gaming machines have begun to incorporate a second display area on a separate, smaller door located above the main door frame, running at the same angle as the original single display area. Where 2 display means are provided, these machines have become known as dual monitor gaming machines, and since their introduction, have increased in popularity due to the flexibility that a second display can provide with displaying dynamic game information. The fitting of an extra display into a separate smaller top door however has also created several disadvantages. In particular, although a second display area now provides a means for changing game information, the player is now forced to view the second display area more often, and when in a seated position, this requires the player to adjust their seating or posture to do so.

The second main disadvantage, is when an attendant or engineer is performing maintenance on a dual monitor gaming machine, they are forced to open both doors so as to not obstruct their work on either of the display means. Where the doors are naturally designed to close, or simply close due to an uneven surface area, this inconvenience often leads to a time consuming duty to keep both doors open simultaneously, leaving the attendant or engineer in an acquired position when performing their respective tasks so as to not have the doors close in on them.

It is an object of the present invention to address and alleviate the problems described in the prior art discussed above, and to improve the ease of a player viewing the display means on a multiple display means gaming machine, whilst simultaneously allowing an attendant or worker to perform maintenance duties with more ease.

Summary of the invention

In accordance with the present invention, there is provided a door frame for a gaming machine with either at least one open portal having various sections with which to view a plurality of display devices, or a number of open portals with which each may be used to view a display device. The door frame is mounted preferably to the front of a gaming console, also known as a gaming machine, to allow a player to play a game of chance requiring a plurality of display devices which are viewable through the openings in the door frame. Each open portal and/or section of an open portal is constructed at a varying angle to each other so that the vertical angles of the open portals or sections that meet (being the vertex of 2 given angles), are obtuse angles when viewing the front surface of the door frame, with each display means provided being at least significantly aligned and coplanar to the angled open portal or section. This allows the display means front surface to appear to be angled towards each rather than away from each other when viewing the front surface of the door frame (being the surface facing the player). Ultimately this allows the player to with as little posture changing as necessary, view 2 or more display means by merely changing the angle of their eye or with only a slight tilt of their neck.

The display means may be affixed to the inner surface of the door frame (i.e. the surface facing away from the player) with the display means frontal surface facing the same way as the front of the door frame. Alternatively, the display means may be affixed to the gaming console and viewable through the open portal or section in the door frame. It is preferred that the display means will take up the entire of the section or opening provided for a display means, or in the alternative a substantial portion where any gaps are further covered by other means, such as a metal plate, foam, moulded fitting, padding around the rim or the display means or other such component designed to prevent or conceal gapping around the display device as is well known in the art.

Preferably located below the opening portals, is a control panel that runs substantially from one edge of the door frame to the other. Alternatively the control panel may be detached from the gaming machine so as to be played from a remote location, though general within viewing range. The control panel provides a player an activation means for the game played on the gaming machine, though a touch screen display may also be used in conjunction with or as an alternative to the control panel. A coin and ticket dispenser is optionally placed on or in close proximity to the door frame. Preferably the door frame would also include a loyalty card input device as well known in the art.

A second important aspect to the door frame is its ability to also allow an engineer or attendant to access all the internal workings of the gaming machine more readily. As both display means in a dual display gaming machine system will be accessible along with other internal components to the gaming machine whilst only having to open one door, the engineer or attendant as the case may be, will be relinquished of the burden of having to undo 2 locks, and hold both doors open whilst performing their work.

The display means may comprise of a Cathay Ray Tub monitor, TFT display, liquid crystal display, rear projection display, a plasma display, a back light display, physical reels, or any other display means as known in the art. The art of affixing such display means to a gaming door frame or gaming machine as well known in the art may require screws, bolts, adhesive, braces, sliding plates, rollers, frames, hinges, locks or other such means to ensure they are securely fastened.

The door frame would preferably be rectangular in shape with equal length sides, however the actual frame width and height would depend on the model of gaming machine for which the door frame will be attached. Alternatively, the door frame may also vary in general shape to accommodate any further style or aesthetic presentation required by the door frame. Preferably the door frame would also fit snugly to a gaming machine cabinet, where the cabinet contains the internal workings of the gaming machine, and will serve to protect the otherwise exposed backings of the display means. The door frame may be affixed to the gaming machine by many different means. More commonly, a full length hinge is affixed to both the inside rim of the door frame and the gaming machines cabinet to accompany the weight of the door frame, however strongly attached hinges placed at various points along the rim of the door frame and gaming machine would also suffice. Preferably, the inner wall of the gaming machine would also be re-enforced so as to accommodate the additional of any display means, where the display means have been attached to the door frame.

Brief description of the drawings

The invention will be further described by way of example with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a gaming console according to one embodiment of the present invention;

Fig.2 is a schematic diagram of a top portion of a gaming console door frame with 2 open portals.

Fig.3 is a schematic diagram of a top portion of a gaming console door frame with 1 open portal with 2 display means sections.

Fig.4 is a schematic diagram of a top portion of a gaming console door frame with 1 open portal with 3 display means sections.

Fig.5 is a schematic diagram of a top portion of a gaming console door frame illustrating the perspective of a player.

Detailed description of preferred embodiments

Figure 1 shows a gaming console 10 with a door frame 15 attached to it, which is capable of supporting 2 display means 17a and 17b, being mounted on or behind the door frame at differing angles in relation to each other. Preferably, the display means 17a and 17b are mounted one above the other, and in close proximity so as to aid the view of both display means at the same time, and aid in limiting the size of the door frame. Other preferable features of the gaming console 10 can be found in the gaming console 10 having an operating panel 20 on which there is located a coin slot 22, a banknote slot 24, stake selectors 26, and a game initiator means 28. It should be appreciated that the operating panel 20, coin slot 22, bank note slot 24, stake selector, and game initiation means may individually or as a whole be accessible in a remote location to the gaming console 10, and may include additional controls, input or out put devices as are required. Generally, the display 17a and 17b would be used to display to the player a series of symbols or various gaming material (not shown) for which a game of chance will be played (not shown), however the displays may also be used for other purposes, such as intermittent advertising or promotional materials. A third display means, promotional material, belly panel, game rules, or game pay tables can be provided in a lower section 27c of the gaming console 10 if required.

Figure 2 depicts the upper portion 16 of a door frame 15 of a gaming console 10, with 2 open portals 17a and 17b allowing differing size displays to be mounted on the door frame 15 or within the gaming console 10 facing towards a person viewing the door frames 15 frontal side. The

viewing areas of the display means are angled in accordance with the open portals 17a and 17b to allow viewing of the display means, with the display means being affixed to the interior of the door frame 15, or the gaming console 10 allowing minimal gaps between the display means and the door frame. Additionally, 41 depicts the obtuse angle the 2 display areas generally coincided when viewing the front surface of the door frame where. Of course, the display means may be separated by a gap or curvature, whereby the actual vertex joining the 2 angles would meet at a corresponding point located behind the door frame. Figure 3 further depicts an upper portion 16 of a door frame 15 with a single open portal with 2 distinct sections 17a and 17b being substantially separated by a horizontal edge running coplanar with the top side of the section 17a and with the base section of 17b indicated by the dotted line 31 where the sides of each section 17a and 17b meet. The open portals 17a and 17b are angled differently to again accommodate the angles required for a player to more comfortably view both displays. In an alternative embodiment the display means may also be mounted to either the gaming console 31 or door frame to allow a viewer to further adjust the display means with the original mounting adding to reduce any required adjustments.

Figure 4 illustrates an upper portion 16 embodiment using a door frame 20 to be used by a gaming console 10. Similar to the embodiment in figure 3, the open portal uses a single opening comprised of multiple sections 17a to 17c, to view multiple display means affixed to the door frame itself, or to the actual gaming console. The sections are divided clearly by the incline or angle for that section being different from at least one other section's angle.


Figure 5 simply demonstrates the benefit of using multiple angled displays on a door frame 15, by showing a players 19 line of sight 18a and 18b when viewing multiple display areas 17a and 17b, to provide the player 19 with a more pleasurable viewing experience.

We Claim:

1. A door frame for a gaming console, wherein said door frame includes at least 2 display means, with at least 1 display means being viewable at a different vertical angle when compared to at least 1 other of the said at least 2 display means, with each said display means being either:
 - a. Affixed to the back of said door frame; or
 - b. Affixed to said gaming console

so as to be viewed through at least 1 opening in said door frame when said door frame is in at least a closed position.

2. a door frame as claimed in claim 1 wherein if there is one open portal provided for at least 2 display means, said open portal is comprised of a section for each display means to be viewed through, with each section having a pair of left and right sides being substantially equal in angle, and a pair of top and base sides being substantially horizontal, with either the top or base side of each section being substantially shared by another section of said open portal, and wherein said pair of left and right side angles for each section are at an obtuse angle to at least one other sections said pair of left and right sides when said door frame is viewed from the front.
3. a door frame as claimed in claim 1 wherein if said door frame has more than one open portal to view at least 2 display means, each open portal has a pair of left and right sides being substantially equal in angle, and a pair of substantially horizontal top and base sides, with each open portal said pair of left and right sides being at an obtuse angle to at least one other open portal's said pair of left and right sides when said door frame is viewed from the front.
4. a door frame for a gaming machine as claimed in claims 1 to 3 wherein an attendant need only open said door frame to access said at least two display means other than the actual display surface of said at least two display means.
5. a door frame for a gaming machine substantially as hereinbefore described with reference to and as shown in the accompanying drawings.



Abstract

A door frame is provided that uses angled display areas in a single frame to allow more than one display means to be mounted or placed behind the door with the viewing area facing outward. This allows a player to more comfortably view a multiple-display gaming machine from a single location while at the same time, allows attendants or engineers working on a gaming machine to more readily access the internal workings of the gaming machine by having to only open a single door.

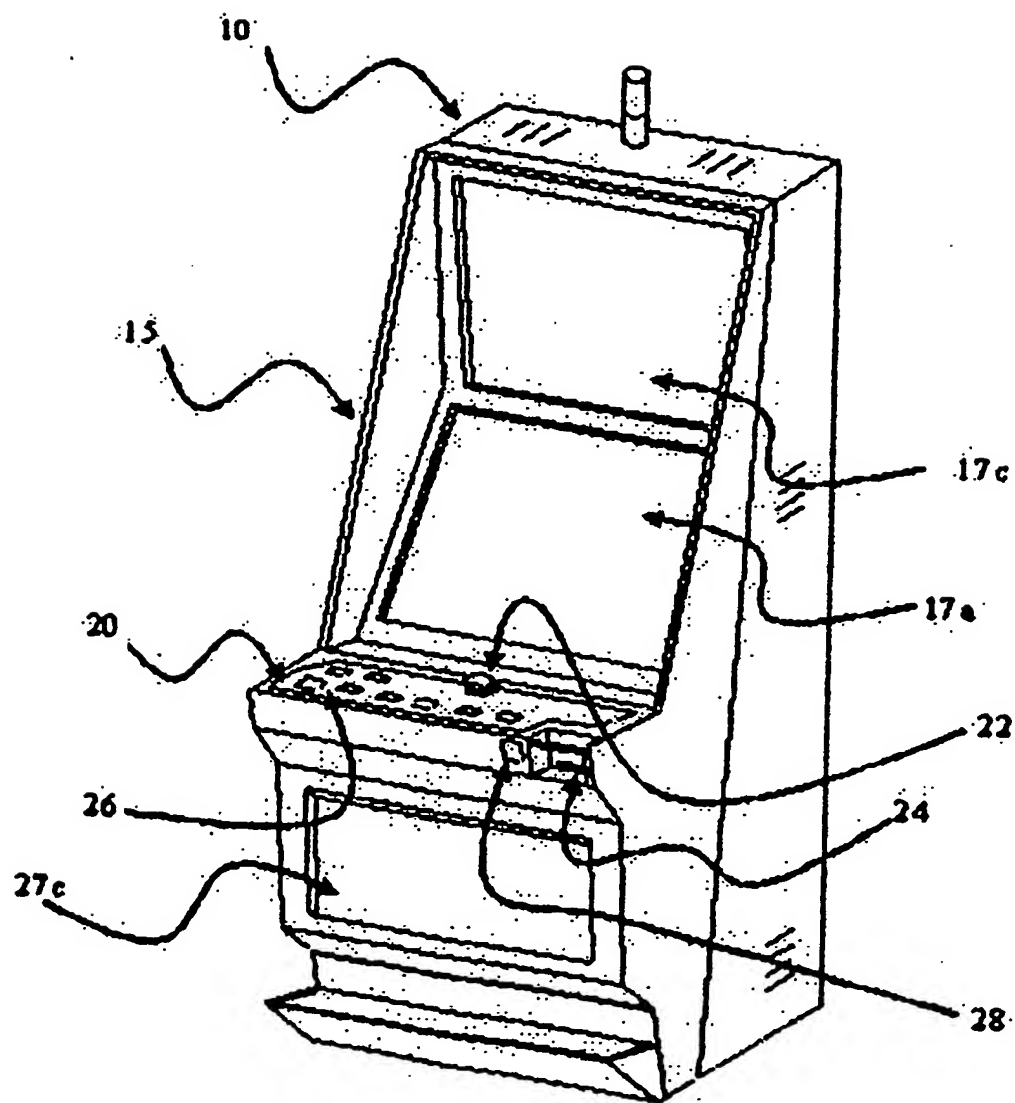


Figure 1

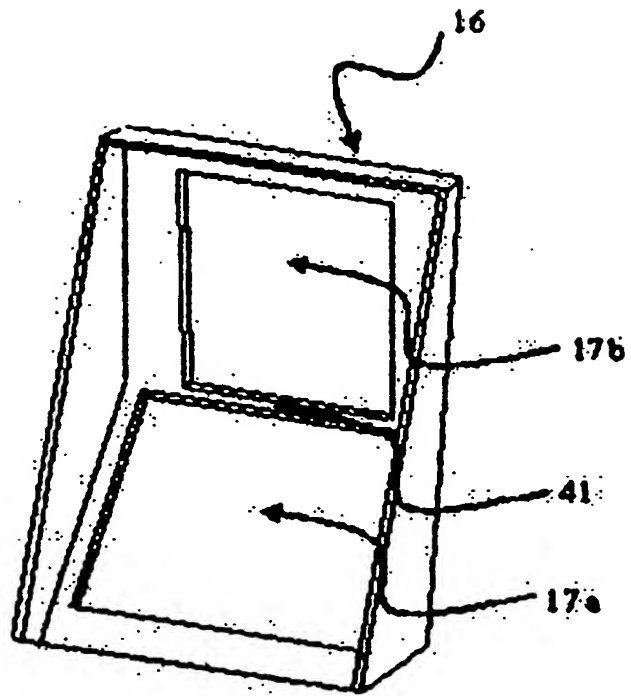


Figure 2

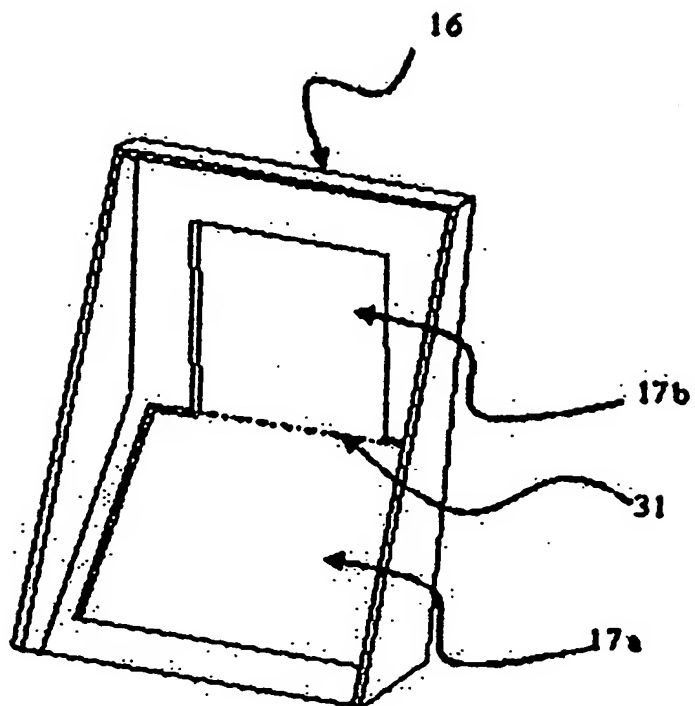


Figure 3

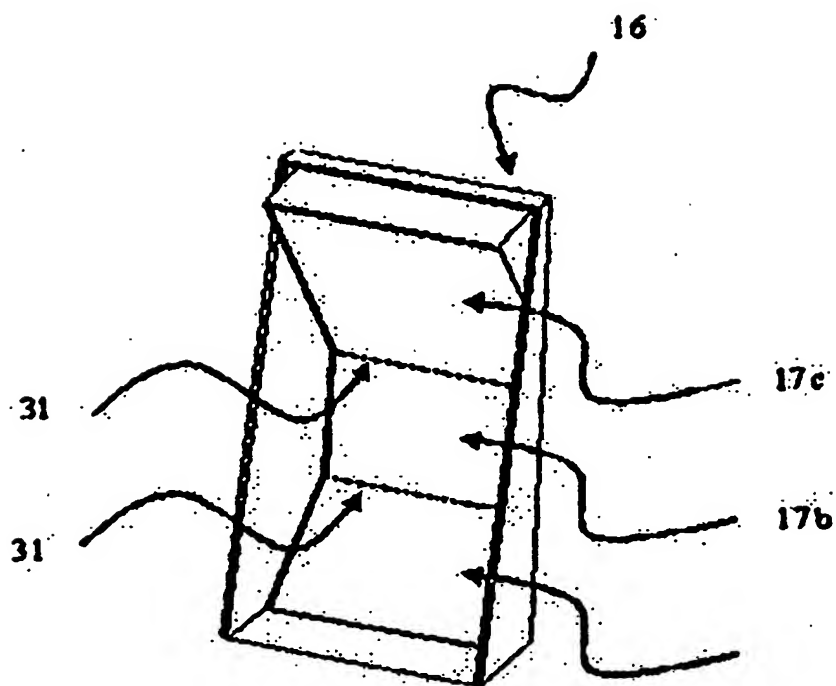


Figure 4

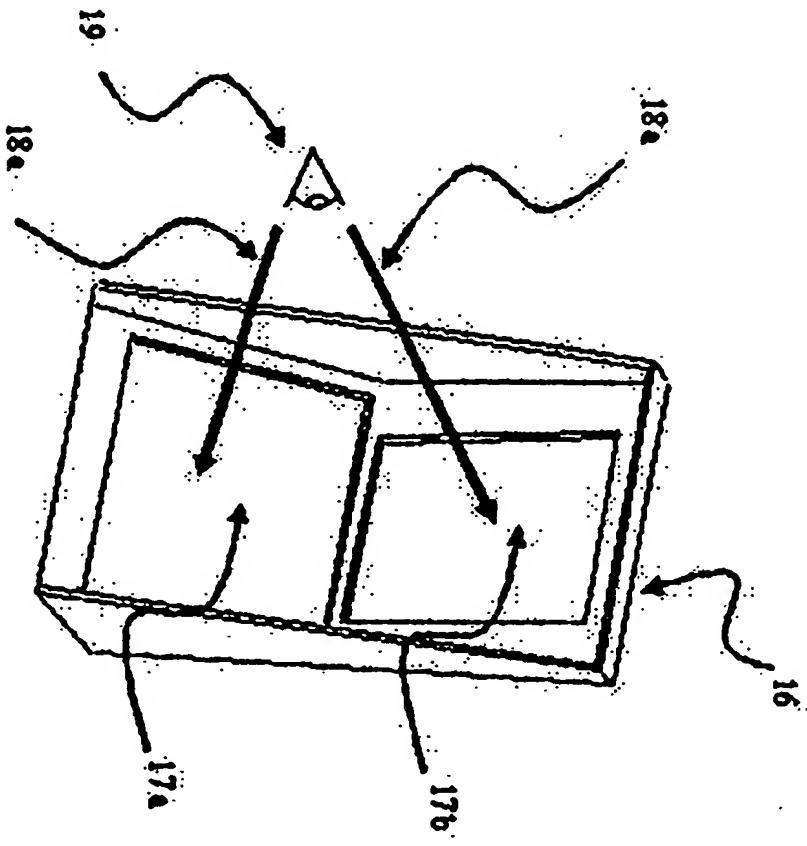


Figure 5